

Abstract of the Disclosure

The present invention relates to a process for treating a metal substrate to improve adhesion of polymeric materials thereto, comprising the steps of

5 intergranular etching a surface of the metal substrate; and
 applying an immersion plated metal to the intergranular etched surface
by immersing the surface in an immersion plating composition comprising one
or more plating metals selected from tin, silver, bismuth, copper, nickel, lead,
zinc, indium, palladium, platinum, gold, cadmium, ruthenium, cobalt, gallium
10 and germanium. In one embodiment, the immersion plated metal is tin. In
one embodiment, the process further comprises a step of adhering the
immersion metal plated surface to a surface of a polymeric non-conductive
material. In another embodiment, the polymeric nonconductive material is
one or more of PTFE, an epoxy resin, a polyimide, a polycyanate ester, a
butadiene terephthalate resin, or mixtures thereof. In one embodiment, the
process further comprises a step of applying a silane over the immersion
plated metal from an aqueous solution of a silane.

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